



SECOND QUARTER 2006
QUARTERLY GROUNDWATER MONITORING REPORT

Sampled on May 21, 2006

Job # SP-5

LOP # 12224

Reveles Property

1503 South Main Street
Fortuna, California 95540

July 12, 2006

This *Quarterly Groundwater Monitoring Report* was prepared for Anastacio Reveles by SounPacific Environmental Services (SounPacific) using data from previous studies conducted by SounPacific and a review of relevant files at the Humboldt County Division of Environmental Health (HCDEH). Reveles Property (the Site) is located at 1503 South Main Street, Fortuna, California (Figure 1).

SITE DESCRIPTION

The Site consists of a small, non-residential, single-story building with an office and a shop/garage situated in the center of the property. The area in front of the building is surfaced primarily with gravel, asphalt, and patches of concrete (Figure 2). The Site is serviced by public utilities.

SITE TOPOGRAPHY AND LAND USE

Previous grading in the southeastern portion of the property has resulted in a relatively level site that slopes gently to the west and northwest. The regional topography also slopes gently to the west and northwest in the general vicinity of the Site. The Site elevation is approximately 185 feet above mean sea level (amsl) (Figure 1). The surrounding land use is predominantly

residential with some commercial properties and undeveloped areas. Commercial buildings are located northwest of the Site, and some undeveloped areas are located northeast of the Site.

SITE HISTORY

Based on the UST system removed and other historical information, it appears the Site was operated as a retail service station, and subsequently for auto repair at some time in the past.

Previous studies overseen by SounPacific indicated the following historical information:

1990 UST Removal (Beacom)

In a letter dated April 24, 1989, HCDEH informed Mr. Reveles that unless his UST was exempt, it must be closed under permit or operated under permit. To comply with this request, Mr. Reveles contracted Beacom Construction of Fortuna, California (Beacom) to remove the entire UST system. The UST system was removed from the Site under permit from the HCDEH in January of 1990. The UST system included two (2) 4,000-gallon unleaded gasoline USTs, one (1) 2,000-gallon waste oil UST, the underground product and vent lines, and the electrical conduit and wiring. At the time of removal, holes were observed in the USTs and a hydrocarbon odor was present in the excavation pit. HCDEH staff collected six soil samples from the ends of the USTs. Of the six samples collected, all six samples reported concentrations of BTXE less than one (1) part per million (ppm). Two groundwater samples were collected from the excavation pits. Laboratory analytical results reported concentrations of BTXE greater than 1,000 ppb in both samples. A summary of the soil and groundwater analytical results are reported in Tables 1 and 2, respectively.

HCDEH filed an Unauthorized Release Form with the North Coast Regional Water Quality Control Board (NCRWQCB). By letter dated February 28, 1990, Mr. Reveles was directed by the NCRWQCB to conduct a hydrogeologic assessment to determine the threat and/or impact to groundwater. In November 1990, Mr. Reveles indicated he could not proceed due to financial hardship.

1991-2000

Mr. Reveles was again contacted in 1993 by the NCRWQCB regarding submittal of a Work Plan (WP). Subsequently, in December 1993, the HCDEH sent a letter to Mr. Reveles indicating they were now the lead agency and to submit a WP. HCDEH sent letters (in 1996 and 1999); however, there does not appear to have been follow up to help Mr. Reveles with his financial difficulties until early 2000 when the Site gained acceptance into the Leaking UST Cleanup Fund, at which time Mr. Reveles implemented steps necessary to meet regulatory requirements.

2001 Subsurface Investigation (SounPacific)

On November 12 and 13, 2001, in accordance with the SounPacific March 5, 2001, *Subsurface Investigation Work Plan*, eight soil borings (B-1 through B-8) were drilled and sampled at the Site (Figure 3). In addition to the eight soil borings, temporary wells were also scheduled to be constructed in each of the boring locations. However, due to consistent drilling refusal prior to reaching groundwater in seven of the eight soil borings, it was only possible to install one temporary well (TW-1) at soil boring location B-5 (Figure 3). This issue was discussed with HCDEH on November 13, 2001, and based on these communications an additional boring was drilled into which an additional temporary well (TW-2) was installed (Figure 3). Twenty-three soil samples were collected and analyzed, of which three samples reported concentrations of TPHg. Soil analytical results indicated elevated levels of TPHg (> 50 ppm) adjacent to the USTs and dispenser islands in borings B-3 and B-6 (Table 1). Groundwater samples were collected from both temporary wells, with analytical results reporting TPHg at 33,800 ppb and 18,200 ppb for temporary wells TW-1 and TW-2 respectively. In addition elevated levels of BTXE (> 5,000 ppb), and MTBE (> 100 ppb) were reported in both groundwater samples collected (Table 2). Further investigation was necessary to delineate the groundwater contamination.

HCDEH concurred with SounPacific to prepare a WP to conduct further subsurface investigation, including installation of monitoring wells, and to conduct a sensitive receptor survey in a letter dated November 5, 2002. HCDEH also indicated, in the same letter, that in order to evaluate the site's potential for natural attenuation, additional biodegradation indicators would need to be monitored. SounPacific submitted a *Site Characterization Work Plan*, dated April 12, 2003, which presented monitored natural attenuation as an interim remedial alternative

to monitor the hydrocarbon degradation at the Site. HCDEH did not approve this *Work Plan* and requested SounPacific to develop a site conceptual model and to expand the work plan to investigate the source for the observed contamination in the groundwater. In a letter dated June 15, 2004, HCDEH additionally requested that the revised work plan focus on delineating contamination in soil as well as gathering information regarding the previously identified groundwater plume. SounPacific submitted a *Subsurface Investigation Work Plan Addendum*, which included the installation of monitoring wells and initiating a quarterly groundwater monitoring program in January 2005. HCDEH approved the addendum in a letter dated February 24, 2005.

2005 Subsurface Investigation (SounPacific)

On September 6, 2005, SounPacific performed a subsurface investigation at the Site to investigate the source of the groundwater impact and delineate the extent of the soil and groundwater impact. All investigative work was performed in accordance with the approved SounPacific *Subsurface Investigation Work Plan Addendum (Addendum)*, dated January 20, 2004 and additional modifications approved by HCEDH. The investigation consisted of drilling three (3) onsite soil borings (MW-1, MW-2, and MW-3) for soil classification and both soil and groundwater sample collection (Figure 3). Of the 24 soil samples collected, one (1) sample reported concentrations of TPHd and TPHmo. Selected samples were also analyzed for metals; however, all metal results appeared to be within the normal background ranges. The proposed borings were to be converted into monitoring wells; however, groundwater was only encountered in borehole MW-2, with drilling refusal in the other well borings prior to encountering groundwater. As a result, only MW-2 was converted to a groundwater monitoring well.

Due to the refusal before groundwater, on September 7, 2005, three (3) step-out borings (SB-1 through SB-3) were drilled in an additional attempt to investigate the groundwater depth at the Reveles Site (Figure 3). These step-out borings were drilled down to depths of approximately 30 feet bgs. The drilling was terminated at this depth due to drill refusal caused by the extremely rocky condition in the subsurface. No groundwater was encountered in any of the step-out borings.

RESULTS OF QUARTERLY SAMPLING

A quarterly groundwater monitoring program was implemented by SounPacific on December 9, 2005, and is currently scheduled to continue until further notice. SounPacific staff is conducting quarterly groundwater sampling events to monitor petroleum hydrocarbon concentrations onsite, and to collect quarterly water level data, documenting any changes in groundwater levels. The monitoring well was gauged and sampled on May 21, 2005.

MONITORING WELL STATUS

WELL	STATUS	MAINTENANCE / NOTES
MW-1	Never Installed	No Water, well not installed
MW-2	Active	Turbid water with faint HC odor
MW-3	Never Installed	No Water, well not installed

FIELD DATA

Wells gauged: MW-2

Depth to Groundwater: 5.46 feet below top of casing (btoc)

Groundwater Elevation: 181.27 feet amsl

Floating Product: None

On May 21, 2006, the depth to groundwater in the Site's monitoring well was 5.46 feet btoc. When corrected to mean sea level, the water level elevation was 181.27 feet amsl in MW-2. The groundwater level for the May 21, 2006 monitoring event, along with historical levels and elevations are included in Table 3. Prior to sampling, the well was purged; the groundwater field purging parameters are presented on the following page.

MONITORING WELL MW-2 GROUNDWATER FIELD PARAMETERS

Time	Total Vol. Removed/ gal	pH	Temp./ F	Cond./ ms(cm) ⁻¹
12:26 pm	0	5.00	57.09	0.072
12:30	1.1	4.90	56.48	0.078
12:35	2.2	4.68	56.60	0.070
12:39	3.3	4.64	56.66	0.069

ANALYTICAL RESULTS

Sampling locations: MW-2

Analyses performed: TPHg, BTXE, MTBE, DIPE, TAME, ETBE, TBA, TPHd, TPHmo

Laboratories Used: Basic Labs, Redding, California (Cert #1677)

On May 21, 2006, the Site's single monitoring well was sampled for laboratory analysis. The analytical results for the current monitoring event are presented below and graphically depicted in Figure 4. The laboratory report is included as Appendix A. The historical analytical results for all monitoring well sampling events, since the implementation of groundwater monitoring are included as Table 4.

	<u>MW-2</u> (ppb)
TPHg:	ND < 50.0
Benzene:	ND < 0.5
Toluene:	ND < 0.5
Total Xylenes:	ND < 1.5
Ethylbenzene:	ND < 0.5
MTBE:	ND < 1.0
DIPE:	ND < 0.5
TAME:	ND < 5.0
ETBE:	ND < 5.0
TBA:	ND < 50.0
TPHd:	ND < 50
TPHmo:	58

(ND= Not Detected at Laboratory Detection Limit)

COMMENTS AND RECOMMENDATIONS

On May 21, 2006, the second quarter 2006 groundwater monitoring event for the single groundwater monitoring well at the Reveles Property at 1503 South Main Street in Fortuna, California, was conducted. A summary of the results are presented below.

- The depth to groundwater in the onsite well was 5.46 feet btoc (MW-2). When corrected to sea level, the water level elevation was 181.27 feet above mean sea level (amsl).
- The groundwater sample from the Site's single well was collected and analyzed for TPHg, BTXE, five Fuel Oxygenates, TPHd, and TPHmo. TPHmo was reported at a concentration of 58 ppb. Constituents not listed above were not reported at or above the laboratory method detection limits.

Based on the results of the May 2006 monitoring event the following future activities are proposed.

- Groundwater monitoring will be continued, with groundwater level measurements being collected from the single monitoring well, along with groundwater sampling and analysis, for a minimum of one hydrological cycle.
- SounPacific is currently revising a work plan for the installation of additional monitoring wells at the Reveles Property, as requested by the HCDEH in a meeting on June 1, 2006 with SounPacific and confirmed in a letter dated June 7, 2006. The work plan will propose investigation of the apparent shallow, perched water beneath the Site as well as the deeper, permanent water.

CERTIFICATION

This report was prepared under the direct supervision of a California registered geologist at SounPacific. All information provided in this report including statements, conclusions and recommendations are based solely on field observations and analyses performed by a state-certified laboratory. SounPacific is not responsible for laboratory errors.

SounPacific promises to perform all its work in a manner that is used by members in similar professions working in the same geographic area. SounPacific will do whatever is reasonable to ensure that data collection is accurate. Please note however, that rain, buried utilities, and other factors can influence groundwater depths, directions and other factors beyond what SounPacific could reasonably determine.

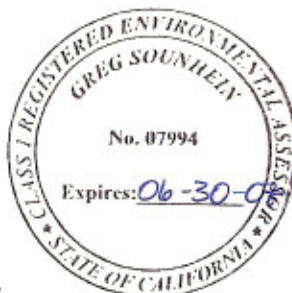
SounPacific

Prepared by:



Greg Sounhein, REA # 07994

Project Manager



Reviewed by:



Michael Sellens, RG # 4714, REA # 07890

Principal Geologist



ATTACHMENTS

FIGURES

- Figure 1: Aerial/Topo Map
- Figure 2: Site Plan
- Figure 3: Sample Location Map
- Figure 4: Groundwater Analytical Results
- Figure 5: MW-2 Hydrocarbon Concentrations vs. Time

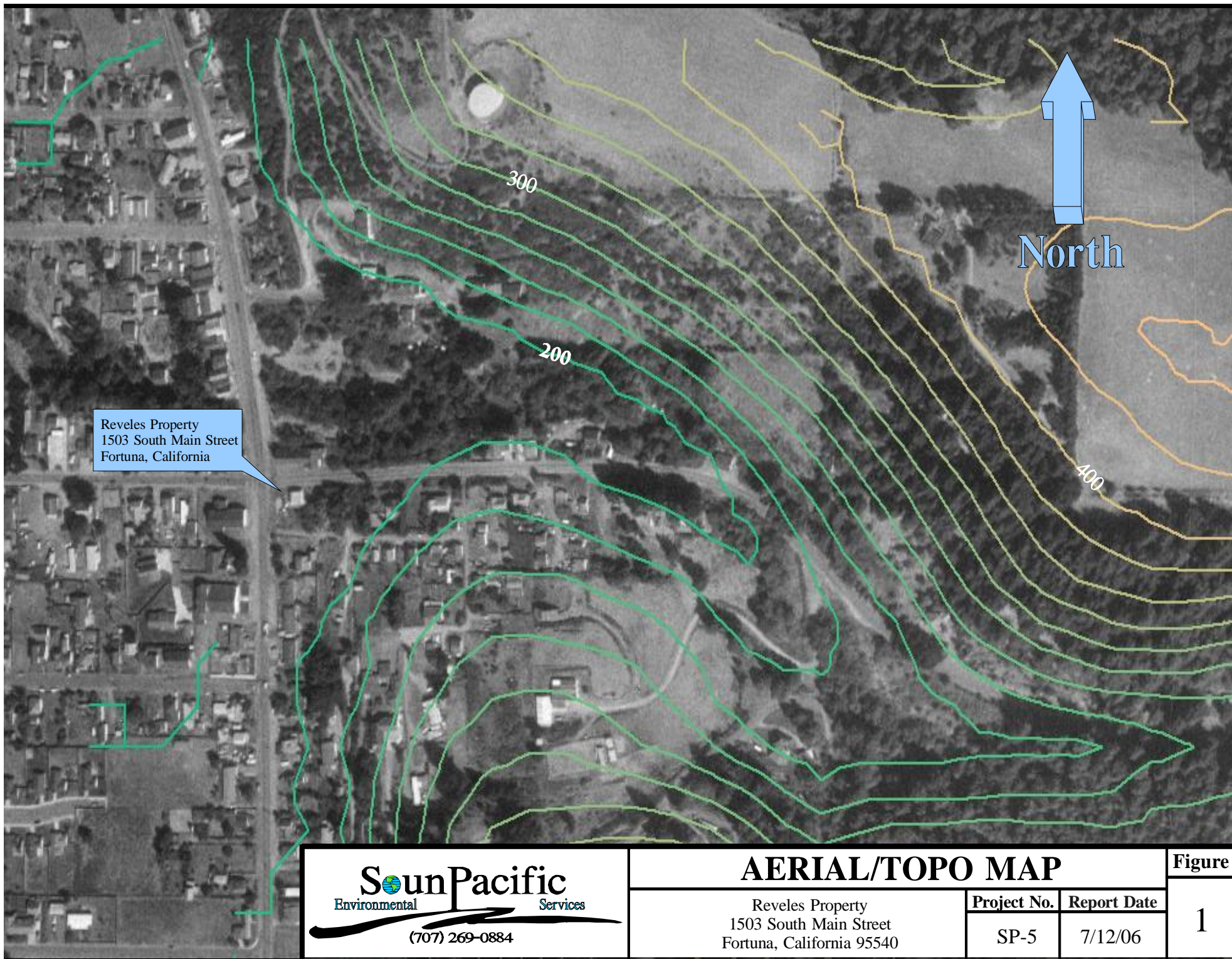
TABLES & CHART


- Table 1: Soil Analytical Results
- Table 2: Groundwater Analytical Results
- Table 3: Water Levels
- Table 4: Groundwater Analytical Results from Monitoring Well
- Chart 1: Hydrograph

APPENDICES

- Appendix A: Laboratory Report and Chain-of-Custody Form
- Appendix B: Standard Operating Procedures
- Appendix C: Field Notes

Figures



 Soun Pacific Environmental Services (707) 269-0884	AERIAL/TOPO MAP		Figure
	Reveles Property 1503 South Main Street Fortuna, California 95540	Project No.	Report Date
		SP-5	7/12/06
			1

NORTH

MILL STREET

PL

MW-2

Previous Dispensers

GARAGE / SHOP

Previous Vent Lines

SOUTH MAIN STREET

PL

Toe of Slope

Previous 2,000-gallon
Waste Oil UST Location

Previous 4,000-gallon
Gasoline UST Locations

LEGEND

Water Line Underground

Overhead Electric Lines



Monitoring Well

0 20 40

APPROXIMATE SCALE IN FEET



SITE PLAN

Reveles Property
1503 South Main Street
Fortuna, California 95540

Project No.

SP-5

Report Date

7/12/06

Figure

2

NORTH

MILL STREET

PL

SOUTH MAIN STREET

MW-2

B-8

B-5 and TW-1

B-6

B-7

Shop

TW-2

B-4

SB-3

SB-2

SB-1

MW-1

B-3

B-2


B-1

PL

MW-3

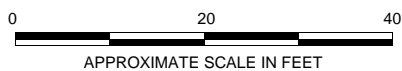
LEGEND

B-1  Soil Boring (Drilled 11/01)

TW-1  Temporary Well
(Installed 11/01 & 12/01)

MW-1  Soil Boring (Drilled 9/05)

MW-2  Monitoring Well



SAMPLE LOCATION MAP

Reveles Property
1503 South Main Street
Fortuna, California 95540

Project No.

SP-5

Report Date

7/12/06

Figure

3

NORTH

MILL STREET

PL

Groundwater Results MW-2		
TPHmo	58	ppb

SOUTH MAIN STREET

PL

LEGEND



Monitoring Well

0 20 40

APPROXIMATE SCALE IN FEET



GROUNDWATER ANALYTICAL RESULTS

Reveles Property
1503 South Main Street
Fortuna, California 95540

Project No.

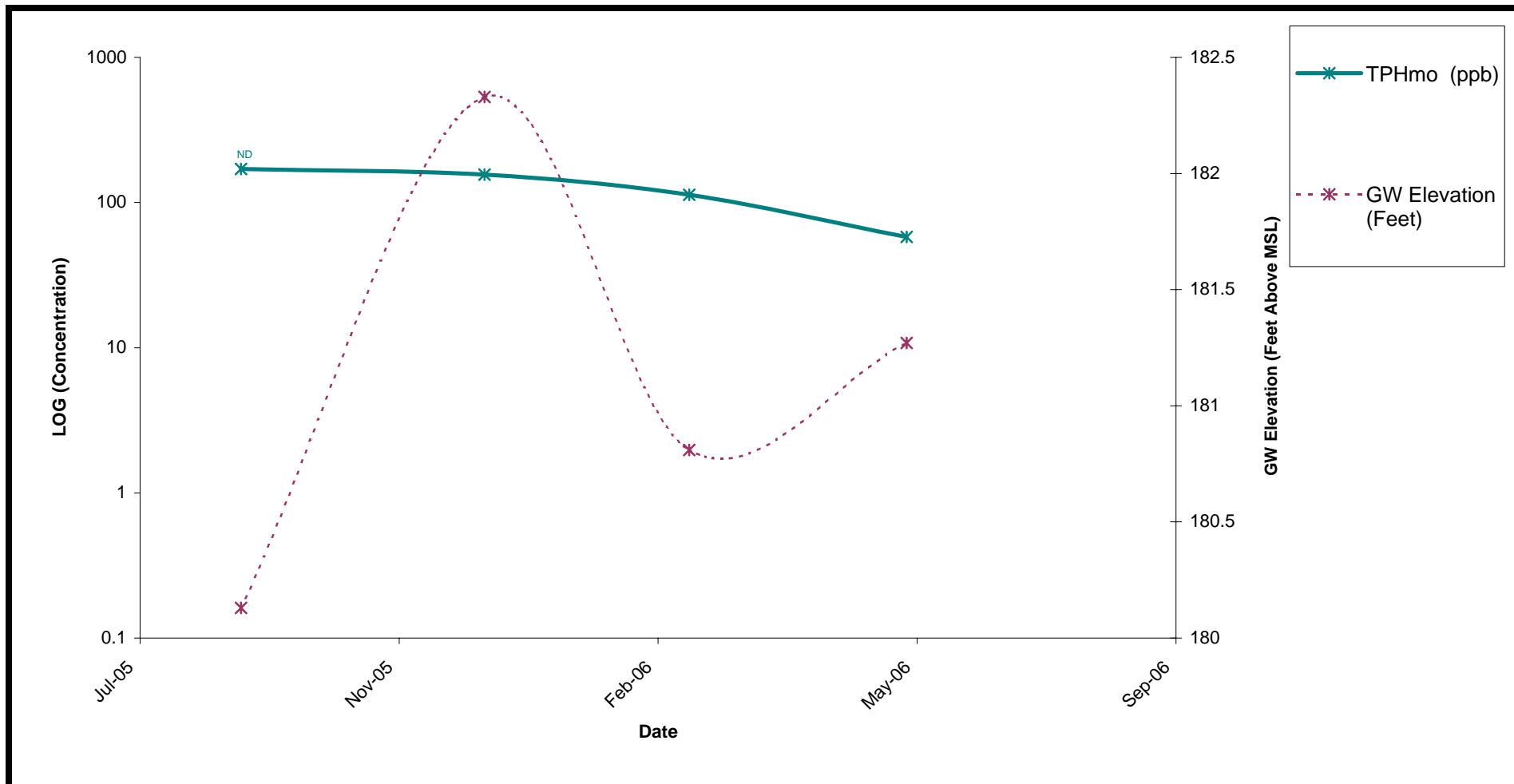
SP-5

Report Date

7/12/06

Figure

4



SounPacific
 Environmental Services
 (707) 269-0884

**MW-2 HYDROCARBON
 CONCENTRATIONS VS. TIME**

Reveles Property
 1503 South Main Street Fortuna,
 California 95540

Project No.
 SP-5

Date
 7/12/2006

Figure

5

Tables & Chart

Table 1
Soil Analytical Results
Reveles Property
1503 South Main Street
Fortuna, California 95540

Sample ID	Sample Location	Sample Date	TPHg (ppm)	Benzene (ppm)	Toluene (ppm)	Ethylbenzene (ppm)	Xylenes (ppm)	MTBE (ppm)	DIPE (ppm)	TAME (ppm)	ETBE (ppm)	TBA (ppm)	DBE (ppm)	DCE (ppm)	TPHC/oil & grease (ppm)	TPHC/ gasoline (ppm)	TPHC/ diesel (ppm)
#1 East	Waste Oil UST Pit	1/10/1990	----	ND < 0.050	0.060	ND < 0.050	ND < 0.05	----	----	----	----	----	----	----	ND < 250	ND < 1	ND < 1
#1 West	Waste Oil UST Pit	1/10/1990	----	ND < 0.050	0.070	ND < 0.050	ND < 0.05	----	----	----	----	----	----	----	ND < 250	ND < 1	ND < 1
#2 South	Gas Oil UST Pit	1/10/1990	----	ND < 0.050	0.14	ND < 0.050	0.060	----	----	----	----	----	----	----	----	ND < 1	----
#2 North	Gas UST Pit	1/10/1990	----	ND < 0.050	0.25	ND < 0.050	0.080	----	----	----	----	----	----	----	----	ND < 1	----
#3 South	Gas UST Pit	1/10/1990	----	ND < 0.050	0.16	ND < 0.050	0.070	----	----	----	----	----	----	----	----	ND < 1	----
#3 North	Gas UST Pit	1/10/1990	----	ND < 0.050	0.14	ND < 0.050	0.080	----	----	----	----	----	----	----	----	ND < 1	----
SP-5 B-1 @ 5'	B-1	11/12/2001	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	----	----	----
SP-5 B-1 @ 10'	B-1	11/12/2001	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	----	----	----
SP-5 B-1 @ 15'	B-1	11/12/2001	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	----	----	----
SP-5 B-2 @ 5'	B-2	11/12/2001	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	----	----	----
SP-5 B-2 @ 10'	B-2	11/12/2001	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	----	----	----
SP-5 B-2 @ 15'	B-2	11/12/2001	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	----	----	----
SP-5 B-3 @ 5'	B-3	11/12/2001	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	----	----	----
SP-5 B-3 @ 10'	B-3	11/12/2001	56.3	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	----	----	----
SP-5 B-3 @ 15'	B-3	11/12/2001	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	----	----	----
SP-5 B-4 @ 5'	B-4	11/13/2001	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	----	----	----
SP-5 B-4 @ 10'	B-4	11/13/2001	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	----	----	----
SP-5 B-5 @ 5'	B-5	11/13/2001	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	----	----	----
SP-5 B-5 @ 10'	B-5	11/13/2001	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	----	----	----
SP-5 B-5 @ 15'	B-5	11/13/2001	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	----	----	----
SP-5 B-6 @ 5'	B-6	11/12/2001	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	----	----	----
SP-5 B-6 @ 10'	B-6	11/12/2001	103	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	----	----	----
SP-5 B-6 @ 15'	B-6	11/12/2001	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	----	----	----
SP-5 B-7 @ 5'	B-7	11/13/2001	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	----	----	----
SP-5 B-7 @ 10'	B-7	11/13/2001	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	----	----	----
SP-5 B-7 @ 10' L	B-7	11/13/2001	0.505	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	----	----	----
SP-5 B-7 @ 15'	B-7	11/13/2001	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	----	----	----
SP-5 B-8 @ 5'	B-8	11/13/2001	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	----	----	----
SP-5 B-8 @ 10'	B-8	11/13/2001	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	----	----	----

Table 1 (cont.)
Soil Analytical Results
 Reveles Property
 1503 South Main Street
 Fortuna, California 95540

Sample ID	Sample Location	Sample Date	TPHg (ppm)	Benzene (ppm)	Toluene (ppm)	Ethylbenzene (ppm)	Xylenes (ppm)	MTBE (ppm)	DIPE (ppm)	TAME (ppm)	ETBE (ppm)	TBA (ppm)	TPHd (ppm)	TPHmo (ppm)	Cadmium (ppm)	Chromium (ppm)	Lead (ppm)	Nickel (ppm)	Zinc (ppm)
MW-1 @ 4'	MW-1	9/6/2005	ND < 1.0	ND < 0.0050	ND < 0.0050	ND < 0.0050	ND < 0.0150	ND < 0.025	ND < 0.020	ND < 0.020	ND < 0.020	ND < 0.50	ND < 1.0	ND < 10	ND < 2.0	61	ND < 10	71	56
MW-1 @ 8'	MW-1	9/6/2005	ND < 1.0	ND < 0.0050	ND < 0.0050	ND < 0.0050	ND < 0.0150	ND < 0.025	ND < 0.020	ND < 0.020	ND < 0.020	ND < 0.50	ND < 1.0	ND < 10	ND < 2.0	68	ND < 10	60	50
MW-1 @ 12'	MW-1	9/6/2005	ND < 1.0	ND < 0.0050	ND < 0.0050	ND < 0.0050	ND < 0.0150	ND < 0.025	ND < 0.020	ND < 0.020	ND < 0.020	ND < 0.50	ND < 1.0	ND < 10	ND < 2.0	51	ND < 10	69	53
MW-1 @ 16'	MW-1	9/6/2005	ND < 1.0	ND < 0.0050	ND < 0.0050	ND < 0.0050	ND < 0.0150	ND < 0.025	ND < 0.020	ND < 0.020	ND < 0.020	ND < 0.50	ND < 1.0	ND < 10	ND < 2.0	41	ND < 10	60	47
MW-1 @ 19'	MW-1	9/6/2005	ND < 1.0	ND < 0.0050	ND < 0.0050	ND < 0.0050	ND < 0.0150	ND < 0.025	ND < 0.020	ND < 0.020	ND < 0.020	ND < 0.50	ND < 1.0	ND < 10	ND < 2.0	67	ND < 10	68	56
MW-1 @ 23'	MW-1	9/6/2005	ND < 1.0	ND < 0.0050	ND < 0.0050	ND < 0.0050	ND < 0.0150	ND < 0.025	ND < 0.020	ND < 0.020	ND < 0.020	ND < 0.50	ND < 1.0	ND < 10	ND < 2.0	68	ND < 10	69	53
MW-1 @ 25'	MW-1	9/6/2005	ND < 1.0	ND < 0.0050	ND < 0.0050	ND < 0.0050	ND < 0.0150	ND < 0.025	ND < 0.020	ND < 0.020	ND < 0.020	ND < 0.50	ND < 1.0	ND < 10	ND < 2.0	60	11	75	67
MW-1 @ 30'	MW-1	9/6/2005	ND < 1.0	ND < 0.0050	ND < 0.0050	ND < 0.0050	ND < 0.0150	ND < 0.025	ND < 0.020	ND < 0.020	ND < 0.020	ND < 0.50	ND < 1.0	ND < 10	ND < 2.0	76	ND < 10	91	56
MW-1 @ 36'	MW-1	9/6/2005	ND < 1.0	ND < 0.0050	ND < 0.0050	ND < 0.0050	ND < 0.0150	ND < 0.025	ND < 0.020	ND < 0.020	ND < 0.020	ND < 0.50	ND < 1.0	ND < 10	ND < 2.0	62	ND < 10	72	63
MW-2 @ 4'	MW-2	9/6/2005	ND < 1.0	ND < 0.0050	ND < 0.0050	ND < 0.0050	ND < 0.0150	ND < 0.025	ND < 0.020	ND < 0.020	ND < 0.020	ND < 0.50	ND < 1.0	ND < 10	ND < 2.0	54	ND < 10	36	45
MW-2 @ 7'	MW-2	9/6/2005	ND < 1.0	ND < 0.0050	ND < 0.0050	ND < 0.0050	ND < 0.0150	ND < 0.025	ND < 0.020	ND < 0.020	ND < 0.020	ND < 0.50	ND < 1.0	ND < 10	ND < 2.0	50	ND < 10	43	43
MW-2 @ 11'	MW-2	9/6/2005	ND < 1.0	ND < 0.0050	ND < 0.0050	ND < 0.0050	ND < 0.0150	ND < 0.025	ND < 0.020	ND < 0.020	ND < 0.020	ND < 0.50	ND < 1.0	ND < 10	ND < 2.0	41	ND < 10	62	50
MW-2 @ 15'	MW-2	9/6/2005	ND < 1.0	ND < 0.0050	ND < 0.0050	ND < 0.0050	ND < 0.0150	ND < 0.025	ND < 0.020	ND < 0.020	ND < 0.020	ND < 0.50	ND < 1.0	ND < 10	ND < 2.0	75	ND < 10	71	53
MW-2 @ 19'	MW-2	9/6/2005	ND < 1.0	ND < 0.0050	ND < 0.0050	ND < 0.0050	ND < 0.0150	ND < 0.025	ND < 0.020	ND < 0.020	ND < 0.020	ND < 0.50	ND < 1.0	ND < 10	ND < 2.0	55	ND < 10	68	58
MW-2 @ 24'	MW-2	9/6/2005	ND < 1.0	ND < 0.0050	ND < 0.0050	ND < 0.0050	ND < 0.0150	ND < 0.025	ND < 0.020	ND < 0.020	ND < 0.020	ND < 0.50	ND < 1.0	ND < 10	ND < 2.0	48	ND < 10	65	57
MW-2 @ 28'	MW-2	9/6/2005	ND < 1.0	ND < 0.0050	ND < 0.0050	ND < 0.0050	ND < 0.0150	ND < 0.025	ND < 0.020	ND < 0.020	ND < 0.020	ND < 0.50	ND < 1.0	ND < 10	ND < 2.0	53	ND < 10	64	62
MW-3 @ 4'	MW-3	9/6/2005	ND < 1.0	ND < 0.0050	ND < 0.0050	ND < 0.0050	ND < 0.0150	ND < 0.025	ND < 0.020	ND < 0.020	ND < 0.020	ND < 0.50	ND < 1.0	ND < 10	ND < 2.0	59	12	60	56
MW-3 @ 8'	MW-3	9/6/2005	ND < 1.0	ND < 0.0050	ND < 0.0050	ND < 0.0050	ND < 0.0150	ND < 0.025	ND < 0.020	ND < 0.020	ND < 0.020	ND < 0.50	1.6	16	ND < 2.0	54	ND < 10	60	55
MW-3 @ 12'	MW-3	9/6/2005	ND < 1.0	ND < 0.0050	ND < 0.0050	ND < 0.0050	ND < 0.0150	ND < 0.025	ND < 0.020	ND < 0.020	ND < 0.020	ND < 0.50	ND < 1.0	ND < 10	ND < 2.0	58	ND < 10	74	56
MW-3 @ 16'	MW-3	9/6/2005	ND < 1.0	ND < 0.0050	ND < 0.0050	ND < 0.0050	ND < 0.0150	ND < 0.025	ND < 0.020	ND < 0.020	ND < 0.020	ND < 0.50	ND < 1.0	ND < 10	ND < 2.0	65	ND < 10	75	60
MW-3 @ 20'	MW-3	9/6/2005	ND < 1.0	ND < 0.0050	ND < 0.0050	ND < 0.0050	ND < 0.0150	ND < 0.025	ND < 0.020	ND < 0.020	ND < 0.020	ND < 0.50	ND < 1.0	ND < 10	ND < 2.0	63	ND < 10	70	58
MW-3 @ 24'	MW-3	9/6/2005	ND < 1.0	ND < 0.0050	ND < 0.0050	ND < 0.0050	ND < 0.0150	ND < 0.025	ND < 0.020	ND < 0.020	ND < 0.020	ND < 0.50	ND < 1.0	ND < 10	ND < 2.0	62	ND < 10	61	52
MW-3 @ 28'	MW-3	9/6/2005	ND < 1.0	ND < 0.0050	ND < 0.0050	ND < 0.0050	ND < 0.0150	ND < 0.025	ND < 0.020	ND < 0.020	ND < 0.020	ND < 0.50	ND < 1.0	ND < 10	ND < 2.0	54	10	69	56
MW-3 @ 35'	MW-3	9/6/2005	ND < 1.0	ND < 0.0050	ND < 0.0050	ND < 0.0050	ND < 0.0150	ND < 0.025	ND < 0.020	ND < 0.020	ND < 0.020	ND < 0.50	ND < 1.0	ND < 10	ND < 2.0	51	ND < 10	76	59

Notes:

TPHg: Total petroleum hydrocarbons as gasoline.

MTBE: Methyl tertiary butyl ether

DIPE: Diisopropyl Ether

TAME: Tertiary amyl methyl ether

ETBE: Ethyl tertiary butyl ether

TPHd: Total petroleum hydrocarbons as diesel

TPHmo: Total petroleum hydrocarbon as motor oil

DBE: 1,2-Dibromoethane

DCE: 1,2-Dichloroethane

TBA: Tertiary butanol

TPHC: Total Petroleum Hydrocarbons

ppm: parts per million = µg/g = mg/kg = 1000 µg/kg

ND: Not detected: Sample was detected at or below the method detection limit as shown.

Table 2
Groundwater Analytical Results
 Reveles Property
 1503 South Main Street
 Fortuna, California 95540

Sample ID	Sample Location	Sample Date	TPHg (ppb)	Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylenes (ppb)	MTBE (ppb)	DIPE (ppb)	TAME (ppb)	ETBE (ppb)	TBA (ppb)	DBE (ppb)	DCE (ppb)	TPHC/ Gas (ppb)	TPHC/ Gas (IR) (ppb)	TPHd (ppb)	TPHmo (ppb)	Cd (ppb)	Ch (ppb)	Pb (ppb)	Ni (ppb)	Zn (ppb)
#1 Water	Waste Oil UST Pit	1/10/1990	----	490	970	ND < 100	570	----	----	----	----	----	----	----	----	ND < 1	----	----	----	----	----	----	----
#2,3 Water	Gas UST Pit	1/10/1990	----	320	640	240	820	----	----	----	----	----	----	----	20,000	----	----	----	----	----	----	----	----
TempW-1	TW-1	12/13/2001	33,800	638	4,700	899	5,660	301	ND < 50	162	ND < 10,000	ND < 100	ND < 50	ND < 50	----	----	----	----	----	----	----	----	----
TempW-2	TW-2	12/13/2001	18,200	182	2,800	239	2,060	122	ND < 0.5	46.8	ND < 0.5	ND < 100	4.6	ND < 0.5	----	----	----	----	----	----	----	----	----

Notes:

TPHg: Total petroleum hydrocarbons as gasoline.

MTBE: Methyl tertiary butyl ether

DIPE: Diisopropyl ether

TAME: Tertiary amyl methyl ether

ETBE: Ethyl tertiary butyl ether

TPHC: Total petroleum hydrocarbons.

TPHd: Total petroleum hydrocarbon as diesel

TPHmo: Total petroleum hydrocarbon as motor oil

DBE: 1,2-Dibromoethane

DCE: 1,2-Dichloroethane

TBA: Tertiary butanol

ppb: parts per billion = µg/l = .001 mg/l = 0.001 ppm.

ND: Not detected at or below the method detection limit as shown.

IR: Infrared

Table 3
Water Levels
 Reveles Property
 1503 South Main Street
 Fortuna, California 95540

Sample Location	Date	Depth to Bottom/ Feet BGS	Survey Height/ Feet Above MSL	Depth to Water/ Feet BGS	Adjusted Elevation/ Feet Above MSL
MW-2	9/6/2005	13.46	186.73	6.60	180.13
	12/9/2005	12.11	186.73	4.40	182.33
	2/26/2006	12.15	186.73	5.92	180.81
	5/21/2006	12.15	186.73	5.46	181.27

Table 4
Groundwater Analytical Results from Monitoring Wells
 Reveles Property
 1503 South Main Street
 Fortuna, California 95540

Sample Location	Annual Quarter	Sample Date	TPHg (ppb)	Benzene (ppb)	Toluene (ppb)	Xylenes (ppb)	Ethylbenzene (ppb)	MTBE (ppb)	DIPE (ppb)	TAME (ppb)	ETBE (ppb)	TBA (ppb)	TPHd (ppb)	TPHmo (ppb)	Cd (ppb)	Cr (ppb)	Pb (ppb)	Ni (ppb)	Zn (ppb)
MW-2	Third Quarter	9/6/2005	ND < 50	ND < 0.5	ND < 0.5	ND < 0.5	ND < 0.5	ND < 1.0	ND < 1.0	ND < 1.0	ND < 1.0	ND < 10	54	ND < 170	ND < 10	300	36	390	400
	Fourth Quarter	12/9/2005	ND < 50	ND < 0.3	ND < 0.3	ND < 0.6	ND < 0.3	ND < 1.0	ND < 0.5	ND < 1.0	ND < 5.0	ND < 100	ND < 50	156	ND < 5.0	75	ND < 15	82	94
	First Quarter	2/26/2006	ND < 50	ND < 0.5	ND < 0.5	ND < 1.5	ND < 0.5	ND < 1.0	ND < 0.5	ND < 5.0	ND < 5.0	ND < 50.0	ND < 50	113	ND < 5.0	43	28	46	445
	Second Quarter	5/21/2006	ND < 50.0	ND < 0.5	ND < 0.5	ND < 1.0	ND < 0.5	ND < 1.0	ND < 0.5	ND < 5.0	ND < 5.0	ND < 50.0	ND < 50	58	----	----	----	----	----

Notes:

TPHg: Total petroleum hydrocarbons as gasoline

TBA: Tertiary butanol

Cd: Cadmium

Zn: Zinc

MTBE: Methyl tertiary butyl ether

ETBE: Ethyl tertiary butyl ether

Cr: Chromium

DIPE: Diisopropyl Ether

ppb: parts per billion = $\mu\text{g/l} \div .001 \text{ mg/l} = 0.001 \text{ ppm}$.

Pb: Lead

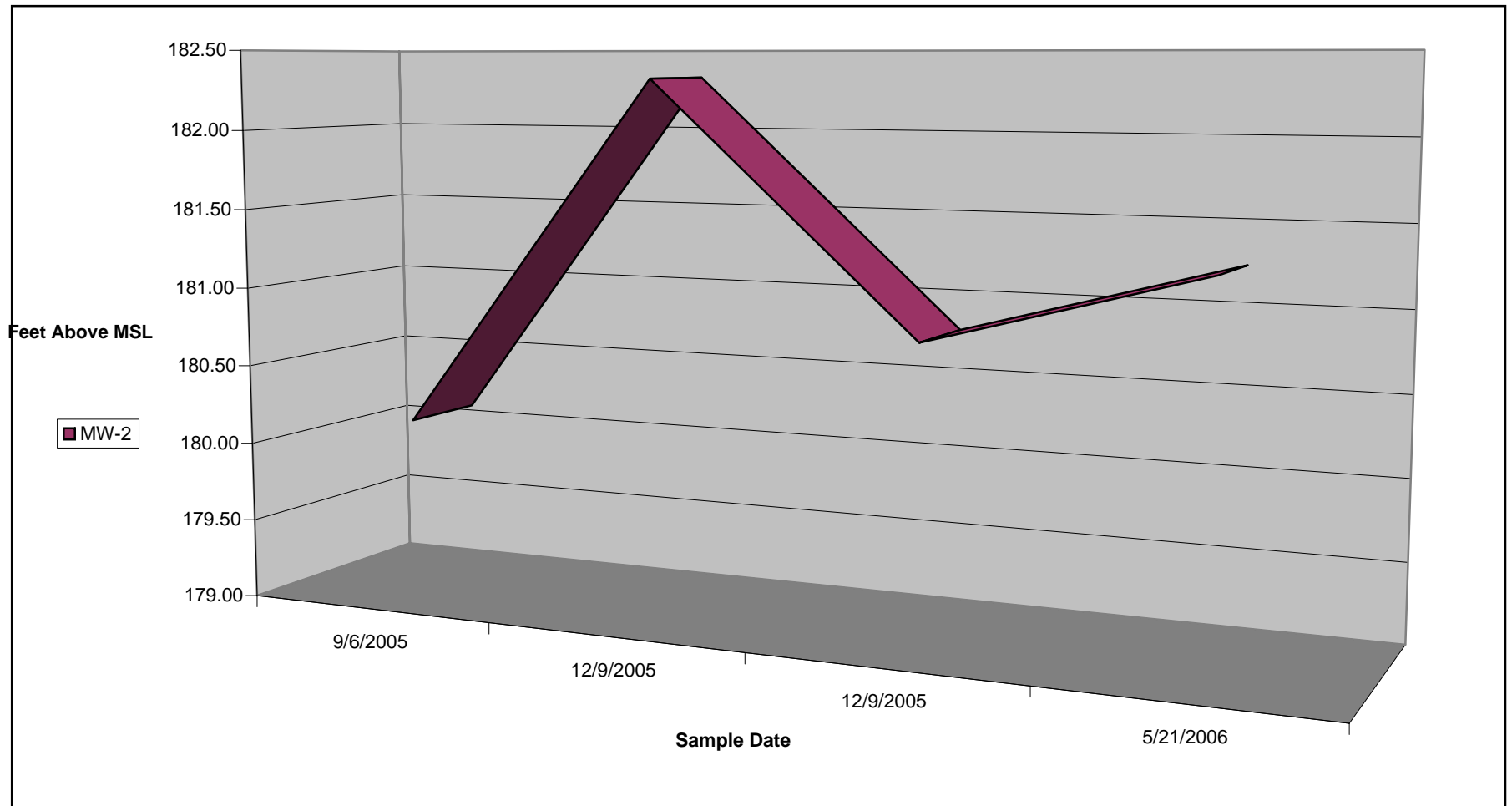
TAME: Tertiary amyl methyl ether

ND: Not detected. Sample was detected at or below the method detection limit as shown.

Ni: Nickel

* Analytical results for Volatile Organic Compounds were reported below laboratory detection limits with one exception. Sec-Butylbenzene was detected at a concentration of 0.7 ppb in well MW-2 on 12/19/05

Chart 1
Hydrograph
Broadway 76
1330 Broadway
Eureka, California 95501



Appendices

Appendix A



www.basiclab.com

voice 530.243.7234 2218 Railroad Avenue
fax 530.243.7494 Redding, California 96001

June 08, 2006

Lab ID: 6050857

Andy Malone
SOUNPACIFIC
4612 GREENWOOD HEIGHTS DR
KNEELAND, CA 95549
RE: REVELES SP-5

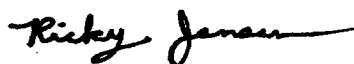
Dear Andy Malone,

Enclosed are the analysis results for Work Order number 6050857. All analysis were performed under strict adherence to our established Quality Assurance Plan. Any abnormalities are listed in the qualifier section of this report.

If you have any questions regarding these results, please feel free to contact us at any time. We appreciate the opportunity to service your environmental testing needs.

Sincerely,


For



Ricky D. Jensen
Laboratory Director
California ELAP Certification Number 1677



www.basiclab.com

voice 530.243.7234 2218 Railroad Avenue
fax 530.243.7494 Redding, California 96001

Report To: SOUNPACIFIC
4612 GREENWOOD HEIGHTS DR
KNEELAND, CA 95549

Attention: Andy Malone
Project: REVELES SP-5

Description: MW-2

Matrix: Water

Lab ID: 6050857-01

Lab No: 6050857
Reported: 06/08/06
Phone: 707-269-0884
P.O. #

Sampled: 05/21/06 00:00

Received: 05/24/06 11:48

TPH Gasoline Range Organics

Analyte	Units	Results	Qualifier	MDL	RL	Method	Analyzed	Prepared	Batch
Gasoline	ug/l	ND			50.0	EPA 8015/8260	05/26/06	05/26/06	B6E0710
Benzene	"	ND			0.5	"	"	"	"
Toluene	"	ND			0.5	"	"	"	"
Ethylbenzene	"	ND			0.5	"	"	"	"
Xylenes (total)	"	ND			1.0	"	"	"	"
Methyl tert-butyl ether	"	ND			1.0	"	"	"	"
Di-isopropyl ether	"	ND			0.5	"	"	"	"
Tert-amyl methyl ether	"	ND			5.0	"	"	"	"
Ethyl tert-butyl ether	"	ND			5.0	"	"	"	"
Tert-butyl alcohol	"	ND			50.0	"	"	"	"
Surrogate: 4-Bromofluorobenzene		109 %		43-155		"	"	"	"

TPH Diesel & Motor Oil

Analyte	Units	Results	Qualifier	MDL	RL	Method	Analyzed	Prepared	Batch
Diesel	ug/l	ND			50	EPA 8015 MOD	05/30/06	05/24/06	B6E0578
Motor Oil	"	58			50	"	"	"	"
Surrogate: Octacosane		104 %		50-150		"	"	"	"

Notes and Definitions

J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag). The J flag is equivalent to the DNQ Estimated Concentration flag.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the detection limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
<	Less than reporting limit
≤	Less than or equal to reporting limit
>	Greater than reporting limit
≥	Greater than or equal to reporting limit
MDL	Method Detection Limit
RL/ML	Minimum Level of Quantitation
MCL/AL	Maximum Contaminant Level/Action Level
mg/kg	Results reported as wet weight
TTLC	Total Threshold Limit Concentration
STLC	Soluble Threshold Limit Concentration
TCLP	Toxicity Characteristic Leachate Procedure


Approved By

Basic Laboratory, Inc.
California D.O.H.S. Cert #1677

Appendix B



Standard Operating Procedures

Groundwater Level Measurements and Free Phase Hydrocarbon Measurements

All SounPacific staff and contractors shall adopt the following procedures any time that groundwater elevations are determined for the purposes of establishing groundwater gradient and direction, and prior to any sampling event.

Wells are to be tested for free phase hydrocarbons (free product) before the first development or sampling of any new well, and in any well that has historically contained free product.

Equipment Checklist

- ☐ Combination water level / free phase hydrocarbon indicator probe (probe)
- ☐ Gauging Data / Purge Calculations Sheet
- ☐ Pencil or Pen/sharpie
- ☐ Disposable Gloves
- ☐ Distilled Water and or know water source on site that is clean
- ☐ Alconox (powder) or Liquinox (liquid) non-phosphate cleaners—do not use soap!
- ☐ Buckets or Tubs for decontamination station
- ☐ Tools necessary to access wells
- ☐ Site Safety Plan
- ☐ This Standard Operating Procedure
- ☐ Notify Job site business that you will be arriving to conduct work.

Procedure

1. Review Site Safety Plan and utilize personal protection appropriate for the contaminants that may be encountered.
2. Access and open all monitoring wells to be measured. Allow wells to equilibrate for approximately 15 minutes before taking any measurements.

3. Decontaminate probe with Alconox or Liquinox solution, and rinse with distilled water.
4. Determine the diameter of the well to be measured and indicate this on the Gauging Data / Purge Calculations Sheet.
5. Words of caution: Please be careful with water level and product meters probes are not attached with high strength material so please make sure to avoid catching the end on anything in the well and make sure not to wind reel to the point that it could pull on the probe. ***If product is suspect in a well, go to step 6, if no product is suspected go to step 7 below.***
6. **When product is present or suspected:** use the product level meter. Clip the static charge clamp to the side of the well casing. Then lower probe into the well through the product/water interface about one foot if possible. Then slowly raise the probe back up through the product/water interface layer and record the level as the tone changes from solid to broken-record this level in the Gauging Data / Purge Calculations Sheet to the nearest 0.01 foot (DTP). Continue to raise the probe up through the product until the tone stops completely-record this level on the Gauging Data / Purge Calculations Sheet to the nearest 0.01 foot (DTW). Then go to step 8.
7. **When no product is present or suspected:** If no free product is present, record the depth of the water (to the nearest 0.01 foot) relative to the painted black mark on the top of the well casing. Leave the probe in the well just a hair above the water level to ensure the well as equilibrated. As the well rises, the tone will sound. Make sure no increase in water levels have occurred in over a ten-minute period. Water levels can lower as well as rise. Make sure you note when the level you keep lowering the probe to has remained stable for at least ten minutes. Once this has been accomplished, please record this level in the Gauging Data / Purge Calculations Sheet to the nearest 0.01 foot (DTW).
8. Turn off the probe, and use the probe to determine the depth to the bottom of the well relative to the top of the well casing. This is the depth to bottom measurement (DTB).
9. Decontaminate probe and tape by washing in an Alconox/Liquinox solution (***read directions on solution for ratio of water to cleanser***) and use the toothbrush provided to remove any foreign substance from the probe and tape. Then triple rinse probe and tape with clean water and then proceed to take measurements in the next well.
10. If sampling is to occur, proceed to implement SounPacific's Standard Operating Procedure for Monitoring Well Purging and Sampling. If no sampling is to be performed, close and secure all wells and caps.



Standard Operating Procedures

Monitoring Well Purging and Groundwater Sampling

All SounPacific employees and contractors shall adopt the following procedures any time that groundwater samples are to be taken from an existing groundwater monitoring well.

Prior to the implementation of these procedures, the groundwater level **MUST** be measured and the presence of free phase hydrocarbons determined in accordance with SounPacific's Standard Operating Procedures for Groundwater Level Measurements and Free Phase Hydrocarbon Measurements.

Equipment Checklist

- ☐ **Gauging Data / Purge Calculations Sheet used for water level determination**
- ☐ Chain of Custody Form
- ☐ pH/ Conductivity / Temperature meter
- ☐ Pencil or Pen
- ☐ Indelible Marker
- ☐ Calculator
- ☐ Disposable Gloves
- ☐ Distilled Water
- ☐ Alconox/liquinox liquid or powdered non-phosphate cleaner
- ☐ Buckets or Tubs for decontamination station
- ☐ Bottom-filling bailer or pumping device for purging
- ☐ Disposable bottom-filling bailer and emptying device for sampling
- ☐ String, twine or fishing line for bailers
- ☐ Sample containers appropriate for intended analytical method (check with lab)
- ☐ Sample labels
- ☐ Site Safety Plan
- ☐ Tools necessary to access wells
- ☐ Drum space on site adequate for sampling event

Procedure

1. Review Site Safety Plan and utilize personal protection appropriate for the contaminants that may be encountered.
2. Measure groundwater levels and check for the presence of free product in accordance with the Standard Operating Procedures for Groundwater Level Measurements and Free Phase Hydrocarbon Measurements.

Purging

3. Calculate and record the volume of standing water in each well using the information provided on the Gauging Data / Purge Calculations sheet.
 $(DTB-DTW) \times \text{Conversion Factor} = \text{Casing Volume}.$
4. The purge volume shall be at least three times and no more than seven times the volume of standing water (the casing volume).
5. Purge the well by bailing or pumping water from the well into a calibrated receptacle, such as a five gallon bucket or tub with markings to indicate one gallon increments. Collect purgeate in a 55 gallon labeled drum and store on site. Drum labels should include the date, contents, site number, and SounPacific's name and telephone number.
6. Take measurements of pH, conductivity, temperature, and visual observations to verify the stabilization of these parameters. At least five measurements of these parameters should be made throughout the purging process. The parameters shall be considered stabilized if successive measurements vary by less than 0.25 pH units, 10% of conductivity in μS , and 1°C (or 1.8°F). Continue purging until at least three times the casing volume has been removed, and the measured parameters have stabilized as indicated above. Do not exceed seven casing volumes.
7. Take a final depth to groundwater measurement and calculate the casing volume of the recharged well. Ideally, the casing volume should have recharged to at least 80% of the original measured casing volume before sampling commences. If due to slow recharge rates it is not feasible to wait for the well to fully recharge, then note this on the Gauging Data / Purge Calculation Sheet and proceed to sample following the procedure below.

Sampling

8. **After completing groundwater measurement, and checking for free product if necessary, in accordance with SounPacific's Standard Operating Procedures for Groundwater Level Measurements and Free Phase Hydrocarbon Measurements, and after purging monitoring wells as described above, groundwater samples may be collected.**
9. Slowly lower a clean, previously unused disposable bailer into the well water approximately half of the bailer length, and allow the bailer to slowly fill.
10. Withdraw the full bailer from the monitoring well and utilize the included (clean and unused) bottom-emptying device to fill the necessary sample containers, and seal the container with the included PTFE (Teflon) lined cap.
11. When filling VOAs, fill the VOA completely full, with the meniscus rising above the rim of the bottle. Carefully cap the VOA and invert it and gently tap it to determine whether air bubbles are trapped inside. If the VOA contains air bubbles, refill the VOA and repeat this step.
12. All samples shall be labeled with the Sample ID, the Sample Date, and the Sample Location or Project Number. Use an indelible marker for writing on sample labels.
13. Record all pertinent sample data on the Chain of Custody.
14. Place samples in an ice chest cooled to 4°C with ice or "blue ice". Bottles should be wrapped in bubble wrap, and VOA's should be inserted in a foam VOA holder to protect against breakage. Samples are to be kept at 4°C until delivered to the laboratory. Any transference of sample custody shall be indicated on the Chain of Custody with the appropriate signatures as necessary.
15. Utilize clean, previously unused gloves, bailer and line, and bottom-emptying device for each well sampled.
16. When finished with all sampling, close and secure all monitoring wells.
17. Leave the site cleaner than when you arrived and drive safely.

Appendix C

GAUGING DATA/PURGE CALCULATIONS

Job Site: Revelles PropertyJob No.: SP-5Event: 3RD QMSDate: 5-21-06

WELL NO.	DIA. (in.)	DTB (ft.)	DTW (ft.)	ST (ft.)	CV (gal.)	PV (gal.)	SPL (ft.)	Bailer Loads	Notes
MW-2	2	12.15	5.46	6.69	1.1	3.3			Turbid water w/ faint tk odor
									1 drum on-site, about 1/5 full

Explanation:

DIA. = Well Diameter

DTB = Depth to Bottom

DTW = Depth to Water

ST = Saturated Thickness (DTB-DTW)

CV = Casing Volume (ST x cf)

PV = Purge Volume (standard 3 x CV,
well development 10 x CV)

SPL = Thickness of Separate Phase Liquid

Conversion Factors (cf):

2 in. dia. well cf = 0.16 gal./ft.

4 in. dia. well cf = 0.65 gal./ft.

6 in. dia. well cf = 1.44 gal./ft.

Sampler:

Tien-yu Ta.

T0602300167

Well Gauging/Sampling Report

Sheet 1 of 1

Date: <u>5-21-06</u>		Project Name: <u>Reveles Property</u>		Project No: <u>SP5</u>		Well Number: <u>MW-2</u>	
Analyses Tested: <u>TPHg, TPHd, TPHmo, BTEX, SOXys</u>							
Sample Containers: <u>3 HIO JOBS, 2 1L Bottles</u>							
Purge Technique:		<input checked="" type="checkbox"/> Bailor		<input type="checkbox"/> Pump			
Sounding Used:		<input type="checkbox"/> Water Meter		<input checked="" type="checkbox"/> Interface Meter			
Water & Free Product Levels							
Time	Depth to Water	Depth to Product	Notes				
12:15	5.46		No Sheen				
12:21	5.46						
	End						
Field Measurements							
Time	Total Vol. Removed (gal)	pH	Temp (F)	Cond. (µs/cm)	DO (mg/L)	DO (%)	
12:26pm	0	5.00	57.09	0.072	1.28	12.4	
12:30	1.1	4.90	56.48	0.078	1.28	12.3	
12:35	2.2	4.68	56.60	0.070	1.27	12.2	
12:39	3.3	4.64	56.66	0.069	1.36	13.1	
Field Scientist: <u>Tien-yu Tai</u>							